

PICCHE WEEKLY RECORD.

T. J. OSBORNE, MANAGER.
PICCHE, LINCOLN CO., NEVADA.

PACIFIC COAST NEWS.

Important Information from All Over the Coast.

NEWS OF THE WEEK CONDENSED.

A Budget of Miscellaneous Jottings Briefly and Curly Told in this Column.

Homer Sheldon, a well-known resident of San Bernardino, killed himself by falling from the top of a tall shade tree, where he had climbed in a fit of delirium.

It is estimated that 50 per cent of the wheat crop of Eastern Washington and portions of Idaho has already been ruined by the present unprecedented hot spell.

Heavy rains have been reported all over the central part of Arizona, insuring water for agriculture, for stock and for placer mining. The past year has been the driest known in Arizona for twenty years, but it is now believed the drought is broken.

Dr. S. H. Melvin of Oakland, who is one of the oldest and most highly respected citizens of the city, has for the sixth time been elected president of the State Board of Pharmacy, having occupied that position ever since the first organization of the Board.

A house belonging to General N. P. Chipman, located about four miles east of Red Bluff, was burned to the ground last week. The house was unoccupied at the time, and the cause of the fire is unknown. The house was built about four years ago, and was valued at \$7,000.

Carlos Ezeta, ex-President of Salvador, had a narrow escape last week in a San Francisco hotel. Paul Jimenez, of a wealthy family of Salvador, walked up to the table where Ezeta was eating, and announced that he was going to kill him. Jimenez drew his revolver, but did not fire. Ezeta says that the trouble is not over.

The steel girder bridge of the Santa Fe over the Arroyo Seco, between Los Angeles and Pasadena, has been completed at a cost of \$145,000. The bridge measures 750 feet in length and is fifty-six feet in height. While the material was brought from Chicago, all the work was done by the company's own men.

The Southern Pacific Company's depot at Cottonwood, Shasta county, sixteen miles north of Red Bluff, has been burned to the ground. The fire was not discovered until seen by the brakeman on the south-bound freight, at which time the building and two freight cars were almost entirely destroyed. No property was saved, except the cash box, which was recovered by the agent with great difficulty.

Owing largely to the humidity of the atmosphere and the absence of sea breezes July 13 was one of the most oppressive days ever experienced in Los Angeles. The sun rose in an unclouded sky and there was not a breath of air stirring. The mercury began its ascent at sunrise and marked 75 deg. at 7 a. m., 85 deg. at 10 o'clock and 98 deg. at 12 m. For three hours that afternoon business was almost at a standstill owing to the heat.

In consequence of the discovery that the firing of cannon in the Courthouse Park at the recent Republican and Democratic ratification meetings has considerably damaged Fresno courthouse walls, now under repair, the contractors have notified the Board of Supervisors that they will hold the Board responsible for any damages caused in this way until the job is taken off their hands. The Supervisors will forbid any further firing of ordinance in the park.

The sale of the Chino ranch has been closed in with an English syndicate. The first payment, \$50,000, is now on the way from London and will soon be placed in the First National Bank of Los Angeles. The total price of the property is \$1,600,000. The English company intends to colonize the ranch with English people, and several hundred will arrive within the next few months. A hundred men will be put at work at once improving the streets and beautifying the town.

Last February a proposition was submitted to the voters of Suisun to incur an indebtedness of \$42,000 to acquire lands and construct public water works. It was carried by a vote of 145 to 6. Efforts to displace the 5 per cent bonds proved ineffectual, and another election was held submitting the same proposition with the bonds at 6 per cent. The result was a victory for municipal ownership of water works, the vote being 123 to 6.

The upper end of Surprise Valley was visited on July 12, by a heavy thunder shower which lasted about an hour. It was followed by a terrific shower of hail, covering the ground to a depth of two inches for a radius of two miles around Fort Bidwell and completely demolishing gardens and stripping trees of their fruit and nearly all their leaves. Many windows were broken and birds, chickens and turkeys were killed in great numbers. People are in the midst of haying and much hay was damaged by the storm and a great deal of grain was badly lodged.

Captain Henry L. Howison has taken command of the big battleship Oregon. The moment he stepped over the gangway the big white fighter was placed in commission. He was accompanied by Lieutenant-Commander Drake, who will be the executive officer of the vessel. During the past week the big ship has been taking on stores and adding to her crew, until now she has her full complement of men and officers. Orders for the future movement of the vessel have not been announced, and for the present the Oregon will remain at anchor in San Francisco bay.

The Harbor Commissioners are considering a plan of forcing the new

depot building in San Francisco to a completion. It was proposed that the plan is to be carried out by the big structure be surrounded by electric lights and then gangs of workmen be employed. The stone work for the building will by that method be completed and the contractors paid, so that if the purveyors of the Oregon stone should secure a decision in their favor from the Supreme Court they could find little redress. The iron frame work of the building is rapidly going up, and by the end of the present month the builders expect to have the whole north wing of the concrete foundation covered by a steel roof.

At the meeting of the Board of Directors of the San Francisco and San Joaquin Valley Railway Company the ninth assessment of 10 per cent was levied on the stockholders. This will provide nearly a quarter of a million dollars for prosecuting the construction of the road to Fresno. It is believed that when the full face value of the outstanding shares have been paid in there will be sufficient to complete the work between Stockton and Fresno. About a mile and a half of track is now being laid daily. The San Joaquin River will be reached about the 1st of the month, and by that time, if the hot weather moderates, it is hoped to have the big bridge across the stream ready for track laying. At the present time the unusually high temperature makes it difficult to keep as large a force of men at work as desired.

There is not a hall or building in Oakland big enough to meet the requirements of the Oakland Exposition Association. The managers are now preparing for the big show, which will open August 3d and continue for two weeks. It is expected that there will be 500 exhibitors, and the Tabernacle, in which the exposition was held last year, is entirely inadequate to meet the demands for space. The managers have spread two immense tents adjoining the exposition building to accommodate exhibitors. They now have a block of ground, and they believe they can meet the demand for space. Last year 75,000 people visited the exposition in two weeks. This year Superintendent Sharp estimates that 150,000 people will pass through the doors. It will be a show for Alameda county products entirely. Every city and town in the entire county will be represented.

A rancher in Riverside county has grown fine strawberries this season, measuring five inches in circumference.

A heavy storm, which was practically a cloudburst, did great damage throughout Pittsburg and Allegheny. Estimates made from reports coming in from outlying portions indicate a loss of nearly \$500,000.

The Railroad Men's Railroad project has been revived at San Diego, and it is expected that the work of building to Yuma will be begun within sixty days. In the reorganization President Vrooman is the only old officer retained.

Negotiations for the sale of the great Chino ranch, which contains 53,000 acres, to an English syndicate are complete. The syndicate is represented by John Farnham Gilmore, and the final papers of the sale are now drawn up, the purchase price being \$1,600,000.

Carpenter, an American revenue officer, tried to seize a Canadian excursion steamer in the Rainey river because the bar of the boat had been kept open while the steamer was in American waters. The captain outwitted the revenue officer though by sailing into British waters and then compelling him to leave the boat.

The Kansas Court of Appeals, all the Judges concurring, has declared ineffective the law under which divorces have been granted in this State for twenty-five years. It is estimated that 35,000 to 50,000 divorces are affected. The decision also affects property rights and the custody of children. Lawyers in New York apprehend that the Kansas decision will cause an almost endless amount of confusion in the marital relations, in the relations of children to parents and in their custody and in property rights.

The Grand Lodge of the Benevolent Protective Order of Elks in session at Cincinnati completed the installation of officers and adjourned to meet in Minneapolis in July 1897. The following Grand Officers were elected: Exalted Ruler, Meade Dettweiler of Harrisburg, Pa.; Grand Secretary, George Reynolds of Saginaw, Mich.; Grand Treasurer, S. A. Orris of Modesto, Pa.; Esteemed Leading Knight, B. M. Allen of Birmingham, Ala.; Esteemed Loyal Knight, Lewis Houser of Newark, N. J.; Esteemed Lecturing Knight, C. M. Foote of Minneapolis.

Li Hung Chang, the Chinese statesman and diplomat, was given a state reception with military honors in Paris. President Faure, members of the Ministry and other distinguished personages met the famous representative of the Chinese empire. Li Hung Chang spoke briefly, expressing the hope that there would be a growth of the friendly relations existing between France and China, and President Faure responded in a similar strain. The Li Hung Chang would find it advantageous to grant favors when it was in his power to do so to the manufacturers of France.

The mission San Juan Capistrano is undergoing restoration at the hands of the Landmarks club of Los Angeles. Already the business of repairs is well under headway. The tiles of the roof, which have fallen in have been removed and a truss roof of Oregon pine put on, covered again with the tiles. The breaches of the walls are being repaired with solid masonry, new doors and window frames put in place, and the splendid stone vault secured with iron tie rods. The western end all has also been rebuilt and much else of importance has been done. The mission has been leased to the club for a term of years, and a preference given it, as purchaser, should the property ever be for sale.

Secretary Olney is pressing the claim of Victor H. MacCord against the Peruvian government for \$200,000 for injuries sustained by imprisonment during a revolution.

TELEGRAPHIC RESUME

Things That Have Happened all Over the Country.

SPOKEN OF IN THIS COLUMN.

Selections That Will Greatly Interest our Readers Both Old and Young.

The annual convention of the Ancient Order of Hibernians has met in Detroit.

Cornelius Vanderbilt has been stricken with paralysis. His recovery is a matter of conjecture.

At Cincinnati the American Spirits Manufacturing Company began its new system of distributing and announcing that there will be no rate cuttings.

Of Japan's new warships only two will be built in America, one by the Union Iron Works and one by the Cramps. All others will be built in British shipyards.

A memorial of granite and bronze, in commemoration of the signing of the Constitution for the government of the new colony by the Pilgrim fathers, has been unveiled at Provincetown, Mass.

A head-on collision, that resulted in an appalling loss of life, occurred on the Chicago and Northwestern road between Logan and Missouri Valley in Nebraska lately. The best estimate indicates that twenty-seven are dead and fifty-one injured, many of whom will die.

Davidson & Sons, wholesale dealers in marble and granite and manufacturers of tiles and mosaics, of Chicago, have made an assignment. The assets and liabilities are about \$300,000 each. The company first got into financial trouble on account of several failures in the marble business during the last year.

The one hundredth anniversary of the evacuation of Fort Ontario by the British, and which is practically the last of the series of the great centennial celebrations inaugurated in Philadelphia in 1876, was appropriately observed in Oswego, N. Y. The city has been in gala attire, and trains brought in fully 10,000 visitors.

The Ogden street railway system of Ogden has been sold by order of the court. The highest bid was by a representative of the reorganized Jarvis-Conklin interests. The bid was \$300,000. It is proposed to unite the street railway system with the Hot Springs railway, extending nine miles north to the Hot Springs, the whole to be operated by electricity.

A special from Hermosillo, Mex., to St. Louis says: Agents of the Rothschilds have just closed a deal for a group of the richest gold mines in this State. The reported purchase price for the properties is \$5,000,000 in gold. The Rothschilds, before closing the deal, conducted a thorough investigation, covering a period of over one year, of the mines.

At a recent meeting of the Board of Construction to consider the armor of the warships Kearsarge and Kentucky complaints were received from the armor-manufacturers that the plates are so large that they cannot make a perfect material with the ingots of which they are made unless they are constructed about ten tons less weight, and this will reduce the plates somewhat.

The strike situation at the Brown Hoisting Works assumed so dangerous a phase that three more companies of troops were hurried to the scene and are now encamped at the works. During the melee jeers and threats were hurled at the non-union men, police and military, and some stones thrown. The severest fighting was on Hamilton street, and in the charges about forty strikers were pricked with bayonets. After a passage had been opened the military had all it could do to keep the howling mob from chasing the wagons.

The long and bitter fight which has been waged by the Chicago Board of Trade and their representatives on the Board of Directors on the great grain elevator interests on the Exchange has come to an end. The fight has been chiefly directed against the Armour elevators, which were declared irregular, and members of the firm tried on charges of violating the rules. The directors held a special meeting and decided by a vote of 10 to 6 to declare the Armour elevators regular. The anti-elevator element is not extinct, but it is in the minority.

Recent diplomatic correspondence of the State Department contains a translation of a letter of thanks from Mutsu Bito, the Emperor of Japan, to President Cleveland on account of the good offices of the Government toward Japanese subjects in China, which the Emperor says "not only tend to mitigate the services and hardships of war but finally to promote the successful issue of the negotiations for peace, but served to draw still closer the bonds of friendship and good neighborhood which happily unite our two countries."

Articles of incorporation of the Gulf, Rio Grande and Pacific Railway and Construction Company have been filed with the Territorial Secretary of New Mexico. The incorporators are H. L. Warren of Albuquerque, William H. Hutchison and B. Y. McKee of Deming. This corporation is formed to acquire by purchase or otherwise contracts and concessions from and with the Mexican Government for the construction, equipment and management of railroad and telegraph lines in Mexico.

An Earthly Immortality. (Boston Advertiser.)

Mrs. Harriet Beecher Stowe is dead; yet she lives. She lives not only in the cloudless, tearless and perfect life of a world unseen in mortal vision; but on this bank and shoal of time, she lives, and here, too, she can never die. She lives immortal in the liberty that she so mightily helped to win. She lives in a nation's history, from whose pages her name can never be blotted out. Above all, she lives and will forever live in the heart of humanity, that will always be purer and loftier because she poured her heart into it.

FOREIGN NEWS ITEMS.

Intense heat has prevailed throughout the southern portion of Great Britain and in France and Germany.

In London the mercury marked 89 degrees in the shade and 105 in the sun. In Paris the heat was greater, and it was found necessary to close many workshops.

For the whole of Egypt on July 11 there were reported 362 cases of cholera and 321 deaths, several of the deaths being in Egyptian Armenia at Wady Halfa. Major Rodney Owen, the famous Uganda explorer, has died of cholera at Ambigo.

A dispatch from Zanzibar reports that the American bark John D. Brewer, Captain Sjorgren, went ashore at Pangavani. The Government sent a vessel to her assistance. The Brewer was owned by Charles Brewer of Boston, and sailed from New York in April for Zanzibar.

Advices received from Tokio at the Navy Department state that only two cruisers will be built in this country, one by the Cramps and the other by the Union Iron Works. These, it is believed, will be vessels of the Olympia class, which the Japanese Government seems to favor.

A dispatch from Wady Halfa reports that the messenger who carried the news to the Khalifa at Omdurman that his army had been defeated at Firket was immediately put to death by crucifixion. The Khalifa announces that the same fate will be imposed upon any one who mentions Firket in his hearing.

A special from Havana says: General Weyler has notified Consul-General Lee that the Americans imprisoned in Cuban castle will be brought outside the walls to talk to consular representatives whenever desired, provided that twenty-four hours' written notice be sent from the consulate. The Consul-General repeated his request to have the Comptroller's crew transferred to better and less crowded quarters.

The N. Y. Herald's cable says: In an interview with the Minister of Marine he informed me that the Government had authorized the purchase of cruisers in America, but that the contracts would not be necessary credits. The minister said that one of the two cruisers was practically ready and that the other is to be built in February. I learn from a trustworthy source that the credits will be granted though the price is considered excessive.

When the uprising at Chiquimula, Guatemala, broke out, President Reyna Barrios stated that it was nothing but a riot, which would be put down in a day or two. The results have justified his predictions. Three days after the first outbreak the revolutionists were flying toward the Honduran frontier, having first collected a forced loan from most of the rich citizens of the district. It is calculated they took \$25,000 in money and much more in cattle and merchandise.

The insurgents at Apokoroma, Crete, a day or two ago, killed the crew of a Turkish bark. The Turkish troops pursued the insurgents, and in their pursuit fired upon everybody they met along the shore, making no discrimination in favor of women and children, of whom they killed a great many. The action of the troops has caused intense excitement and indignation, and the foreign Consuls have made a protest against it to Berovitch Georgi Pasha, the newly appointed Christian Governor of the island.

Passengers by the coast steamer Mortera, which arrived recently from ports in Eastern Cuba, report that the insurgents are burning many plantations of importance around Puerto Padre and Manihuan. The inhabitants of the estates are taking refuge in the Spanish garrison towns for protection. Cane fields in the districts mentioned have all been burned, and the laborers' huts are reduced to ashes. Even the machinery on the Chaparra sugar estate was destroyed. Several families left homeless arrived here by the Mortera.

The political situation in England has been only partially relieved by the yielding of Gerald Balfour, Chief Secretary for Ireland, to the pressure directed by T. W. Russell, member of Parliament for the South Division of Tyrone, and Joseph Chamberlain, Colonial Secretary, for the modification of the amendments to the Irish Land bill. There was a continuance of the debate by Mr. Russell and others for further modifications of the measure, while the press and people generally are giving expression to sentiments of extreme disgust at the feebleness displayed by the government that exist between the Liberals and Radicals the Government would be in a serious plight.

Advices have been received by friends of Dr. George E. Shuey who, with Charles Burkhalter, left Oakland last May with the Lick Observatory eclipse expedition for Japan to make observations upon the total eclipse of the sun to occur in August. Professor Schaeberle and Louis Masten compose the remainder of the party, which will be distributed over favorable localities in Japan with instruments for observing the various phases of the phenomenon. Professors Schaeberle and Burkhalter will be stationed at Akeshi, where the principal work will be done. The large instruments will be utilized at that point. Kushiro, twenty miles distant, will be the post of Louis Masten. Dr. Shuey will proceed to Mombetsu, on the Okhotsk sea, five days' journey overland. This location, Dr. Shuey says, is the most favorable, climatically, for observations, but it is in a very rough country, mountainous and heavily timbered. The choice of sites has been based upon the Government climatic records.

No Room for More Veterans. Leavenworth (Kas.).—Governor A. J. Smith of the Soldier's Home here has issued a notice that the institution is overcrowded and that it would be a physical impossibility to receive more veterans for some time. The Governor says the membership is close to 3000 and that a dozen to twenty applicants are turned away daily.

Queen Victoria is said to be "very partial" to kippered herring and to ascribe her good health to them. She has not eaten curry for a long time.

THE SUMMER SCHOOL.

Instructive Papers by Men of Recognized Ability.

VALUABLE HORTICULTURAL DATA.

The Best Insecticides—Practical Viticulture—Care of the Olive—Other Good Lectures.

The Farmers' School of Husbandry and Economics, which has just closed a most instructive and interesting session at Camp Roche in the Santa Cruz mountains, has attracted an unusual amount of attention throughout the State. The speakers were men of recognized ability, who treated their subjects in a manner which showed their thorough understanding of the matters discussed. Probably one of the most interesting papers of the meeting was that on "Insecticides," which was treated by Professor Woodworth of Berkeley. He gave a short description of many insects, showing their manner of growth and methods of attacking the tree, and also the proper insecticides and manner of application. The exact formula, she said, could be obtained by addressing the agricultural experiment station at Berkeley. Among those touched upon in the following: For codlin moth, spraying with pure Paris green, being sure to apply during the work of the second and third broods. For woolly aphis, which does injury to the crown of the tree only, scattering of wood ashes or gas lime around that portion of the tree. For black and brown scale he urged irrigation and thorough cultivation, in order to insure a good supply of moisture. For the red spider, which is dangerous only in time of drought or in dry localities, a thorough drenching with water. Sulphur applied as on grape vines is also good. For the pear slug one application of Paris green is sufficient.

Professor Hayne gave a practical lecture on the "Olive and Its Products," which was full of life, interest and value in dollars and cents to the farmer. Professor Hayne spoke at length on the subject of molds and bacteria in their relation to olive picking and oil making. It is a popular delusion to think that molds are spontaneous, he said. All molds are created from spores that are the same as a plant is developed from a seed. These conditions are heat, moisture and nourishment. When olives ripen these spores are always present. When olives are stored for several days in boxes or barrels the conditions of heat and moisture are almost sure to rise. Then if the skins of the olives have been bruised in picking the mycelia, root-like organs, will penetrate all through the olives, decomposing and rendering them mushy so that they are unfit for picking, and incapable of making good oil. The way to prevent this, the speaker declared, is to pick the olives with great care, in buckets half filled with water. Then, if they are to be pickled the work must be done as soon as possible. If they are to be made into oil they should be evaporated at a low temperature in a fruitdryer, after which they may be kept several weeks. All utensils and machinery must be kept scrupulously clean. To prevent powdery mildew on vines finely ground, or sublimed sulphur, free from sulphates, should be used, continued the lecturer. It should be applied in hot, moist weather, before daylight—once when the vines are in blossom and several times after. The Bordeaux mixture is not a satisfactory preventive of common or powdery mildew.

Olive and Its Products.

Professor Hayne gave a practical lecture on the "Olive and Its Products," which was full of life, interest and value in dollars and cents to the farmer. Professor Hayne spoke at length on the subject of molds and bacteria in their relation to olive picking and oil making. It is a popular delusion to think that molds are spontaneous, he said. All molds are created from spores that are the same as a plant is developed from a seed. These conditions are heat, moisture and nourishment. When olives ripen these spores are always present. When olives are stored for several days in boxes or barrels the conditions of heat and moisture are almost sure to rise. Then if the skins of the olives have been bruised in picking the mycelia, root-like organs, will penetrate all through the olives, decomposing and rendering them mushy so that they are unfit for picking, and incapable of making good oil. The way to prevent this, the speaker declared, is to pick the olives with great care, in buckets half filled with water. Then, if they are to be pickled the work must be done as soon as possible. If they are to be made into oil they should be evaporated at a low temperature in a fruitdryer, after which they may be kept several weeks. All utensils and machinery must be kept scrupulously clean. To prevent powdery mildew on vines finely ground, or sublimed sulphur, free from sulphates, should be used, continued the lecturer. It should be applied in hot, moist weather, before daylight—once when the vines are in blossom and several times after. The Bordeaux mixture is not a satisfactory preventive of common or powdery mildew.

The "Policy of the State Toward Railroads" was one of the subjects up for discussion by Dr. Ross. "It was formerly thought that the only problem relating to railroads was the construction problem," he said, "and the National Government gave extensive assistance to railroad builders, as by grants of land. The problem is now one of regulation, control and ownership. It has been demonstrated beyond doubt that the State must take a hand in the regulation of railroads. The logic of events has forced this home. Railroad pools, are necessary in order to prevent the otherwise inevitable bankruptcy of competing roads with its attendant evil effects upon the business interests of the State; but the pools should be under State regulation. State railroad commissions have been created, but in California, which, above all other States, has needed a firm hand, the commission has proved notoriously unfit. It has not, in sixteen years done California \$10 worth of good."

As to the future the speaker said the question presents itself whether we should have Government ownership or Government control. He thought it wise to go slowly before adopting completely the idea of Government ownership, and believed we should experiment cautiously with Government ownership in the meantime go ahead with Government control, which might prove to be a solution of the problem.

Water Transportation.

The question of Water Transportation was also very ably handled by Prof. Ross. After giving several fundamental principles of transportation and describing their manner of growth in the United States he spoke of natural waterways, and divided them into natural waterways, which he defined as ocean and rivers having a depth of thirty feet and over, and artificial waterways, such as ship canals connecting two systems of natural waterways and inland canals connecting lakes.

All canals, he thought, should be under control of the public, through either the State or Nation, as they being controlled by private corporations, which constantly tend toward the best and most satisfactory regulation of railroad rates that has ever been found. A complete system of waterways, he thought, was an almost perfect regulator of railroad rates. Besides being under public control they should be public highways.

In touching on the Nicaragua canal Queen Victoria is said to be "very partial" to kippered herring and to ascribe her good health to them. She has not eaten curry for a long time.

Professor Ross showed how England could undersell our country at present in Western South American countries, and how the building of the canal would greatly benefit the agricultural interests of the Pacific Coast and the manufacturing interests of the Eastern States. He said that the sentiment in favor of building this canal was rapidly growing, and predicted that within five years the shovels of Uncle Sam would be found undertaking this great enterprise.

Prof. Hilgard on Soils.

Prof. Hilgard's lecture was upon "Soils and Their Formation." After a few introductory remarks he continued: "Glacial action where it has existed, has been a very important factor, grinding vast quantities of rock to fine powder. In the chemical action carbonic acid is an important solvent. It exists in all water and in the air in minute quantities, but, being always at work, is effective. The other most important disintegrating factor is oxygen. By the action of these two substances, with heat and moisture, soils are formed. The farmer must become accustomed to the chemical terms, but of the many in use he needs to learn not more than a dozen or so, and of the thousands of different minerals he needs only know about the same number. The elements essential to plant life exist in the soil in minute quantities, not more than one-half of 1 per cent of the total, all told. This makes it possible to supply them as they become exhausted. The soils of the arid regions of the West are richer than Eastern soils, because the essential elements have not been leached out of them.

The minerals from which most soils are derived are quartz, hornblende and the feldspars. By knowing these minerals and their appearance when decomposed the farmer can judge of the quality of the soil and what to supply when its productive power gives out. California soils are rich in lime and potash, but are relatively poor in phosphoric acid. Nitrogen in fruit soils in California is nearly always abundant. The humus of the average California soil contains about three times as much nitrogen as the humus of an average Eastern soil.

The problems of dealing with California soils are new, because this is the first time that the Anglo-Saxon race has come in contact with arid lands. We do not yet know nearly all the facts necessary to guide us in fertilizing, but we do know that we cannot depend on the data collected from Eastern and European sources."

The Injury of Insects to Plants.

Prof. Woodworth's talk on the injury of insects to plants, was very interesting. He said: "A new science of organisms in biology has arisen treating of the relation of insects to their environment," he said. "Insects are studied in relation to all their conditions. The seasons have an important bearing on the amount of injury done by insects to plants. By means of insecticides we make ourselves important factors in insect environment. Nine-tenths of insects injurious to plant life or plant feeders injure the plant by feeding on the leaves, which are the principal part of the plant. The plant-eaters have strong biting jaws and consume large quantities of the leaf substance. The leaf bears an important relation to the plant economy, taking in the carbon which animates breath, transforming it into starch and cellulose, which make up the fibrous portion of the plant. Thus the leaf is the pre-eminent organ for the development of crops."

Mr. Adams, President of Highland Grange, then told of the characteristics of insects and their various influence on field growth.

Dr. Edward A. Ross told of the matter of transformation. He considered the transformation of goods, the effects of the movement of goods, and the great influence it has had on the modern growths of the large cities. The professor then considered the transportation system and showed that the modes of transportation from the light backbone of the double-track broad-gauge railroad have their appropriate place to fill in the transportation question.

Prof. Woodworth's Paper.

Professor C. W. Woodworth, of Berkeley, spoke on "The Relation of Seasons to Insect Injury." He traced the growth of the plant from the increase of sap in the spring to the starting of buds, leaving out, until evaporation equals the absorption of moisture by the roots, storing of food under the bark which forms a layer there, and then the final stimulation of growth and increase of root absorption which leads to the increased leaf growth. He spoke of the primitive cycle of insect life, and divided it into three stages, viz.: Egg, nymph, or intermediate stage, and imago or adult stage, and stated that when the insect was in the nymph stage that it is particularly susceptible to disease. He spoke of different ways in which the seasons affect the growth of the insect, stating that the condition of the season does not alone affect insect life, but a combination of climatic conditions with the condition of the plant and the insect produces the injurious results. Seasons containing no quick changes in temperature were, he said, those in which insects thrive best. The speaker urged careful watching of orchards during spring months in order that the growth of the insect might be carefully noted and effective steps taken toward exterminating it at the most opportune time.

Sugar Beets in Colusa.

G. W. Hart writes the following letter concerning the Colusa county sugar beets to Dr. W. H. Belton, Chairman Sugar Beet Committee, Colusa county. He says: "The sugar beet tests have now reached the most interesting stage in their growth as they are now approaching maturity. The past twenty days have made a wonderful improvement in all of the tests and now even the very poorest are promising well. The farmers are justly proud of their beets and the citizens of Colusa should consider themselves an inspection committee whenever business or pleasure calls them into the country." He concludes by giving a list of seventy-three Colusa county growers who have planted sugar beets this season on trail.

CALIFORNIA MINING.

Subject of Mineral Lands on Railroad Grants Again.

STEADY WORK IN NEVADA COUNTY.

American Bar Mining Company—Many Mills Being Erected—A Right to 60,000 Inches of Water Filled—Notes.

A stock company will be formed to develop property in the vicinity of Volcano, Amador county.

The owners of the Mabel Mine on the divide between Oak Bar and Scott Bar, Siskiyou county, will soon erect a mill.

Another quartz mill is being erected in the vicinity of the Tabbs mine in Placer county. The remarkable success of the latter property has attracted considerable attention to the quartz ledges of the vicinity.

The La Fortuna mine, located ninety miles southeast of Yuma, is said to be the richest mine in the southern country. The first four weeks' run with a 20-stamp mill cleared \$140,000, and there is apparently an inexhaustible amount of ore.

Sausalito has the mining fever. Sergeant Jack Hayes of the San Francisco Harbor Police having discovered gold in what is known as Hurricane Gulch. He already has mapped out a scheme to form a mining company, the members of which own property along the banks of the stream.

At a meeting of the executive committee of the State Agricultural Society held in Sacramento, it was decided to create a special feature to interest mining men at the State Fair. Prizes will be given for one-hand and two-hand rock-drilling contests, the State to supply the rock.

Some miners on the Klamath river paid \$2.50 each day for the privilege of working with rockers on the mine across the river from the Seattle Placer Mining Company's property. This agreement was soon terminated by the owners, as the men were rocking out \$10 a day each.

Articles of incorporation of the American Bar Mining Co., formed to conduct a regular mining business, have been filed at the office of Secretary of State, L. H. Brown. Principal place of business, Nevada City. Directors—John T. McGill, C. H. Mallon, Fred Zeitler, J. O. Whitney, D. F. Douglass, Fred Searls, all of Nevada City. Capital stock, \$10,000,000, of which \$8,571,500 has been subscribed.

D. Harmon, of Berkeley, who is superintending a number of mines in Nevada county, the California and the German, says the former is running full blast, but the latter has been shut down. It has a large body of low-grade ore but with present appliances the expense of mining and milling consumed the profits. It is Mr. Harmon's intention to put in a good plant, with power drills, etc., and then he believes that he can mine and mill for about \$2 per ton.

A. J. Johnson, a prospector, came in from a ranch near Redding bringing with him fine specimens of copper ore. Johnson has been prospecting in that district about two months. He found gossan croppings, similar to those of the famous Iron Mountain mine, which was recently sold for \$800,000. He sank a shaft and fifteen feet down found a sixteen-foot ledge. The ore is quartz and assays 27 per cent in copper. The ledge can be traced on the surface for a distance of 160 rods.